

37 were resolved by SDS-PAGE, and exposed to film. A. Top left and right panels; samples analyzed under non-reducing conditions. B. Lower left and right panels; samples analyzed under reducing conditions. Top and bottom left panels; Cell extracts. Top and bottom right panels; Conditioned media extracts. The relative mobility of the 55 kd monomeric and 100 kd dimeric forms of OPG are indicated by arrowheads.

Please replace the previously submitted Sequence Listing with the Sequence Listing attached hereto.

### IN THE CLAIMS

Please cancel Claims 1-60 without prejudice and add the following new claims.

61. (new) An antibody or fragment thereof which binds an epitope comprising at least a portion of the amino acid sequence of SEQ ID NO:121.

62. (new) The antibody or fragment of Claim 61 which binds to an OPG polypeptide consisting of the amino acid sequence of SEQ ID NO:121.

63. (new) An antibody or fragment thereof which binds an epitope comprising at least a portion of the amino acid sequence of SEQ ID NO:123.

39 64. (new) The antibody or fragment of Claim 63 which binds to an OPG polypeptide consisting of the amino acid sequence of SEQ ID NO:123.

65. (new) An antibody or fragment thereof which binds an epitope comprising at least a portion of the amino acid sequence of SEQ ID NO:125.

66. (new) The antibody or fragment of Claim 65 which binds to an OPG polypeptide consisting of the amino acid sequence of SEQ ID NO:125.

67. (new) The antibody or fragment of Claim 65 which binds to an OPG polypeptide consisting of residues 22-401 inclusive of SEQ ID NO:125.

68. (new) The antibody or fragment of Claim 65 which binds to an OPG polypeptide consisting of residues 22-185, 22-189, 22-194 or 22-201 inclusive as shown in SEQ ID NO:125.

69. (new) The antibody of Claims 61, 62, 63, 64, 65, 66, 67 or 68 which is a monoclonal antibody.

70. (new) The antibody of Claims 61, 62, 63, 64, 65, 66, 67 or 68 which is a chimeric antibody.

71. (new) The antibody of Claims 61, 62, 63, 64, 65, 66, 67 or 68 which is a CDR-grafted antibody.

72. (new) The antibody of Claims 61, 62, 63, 64, 65, 66, 67 or 68 which is a humanized antibody.

73. (new) The antibody of Claims 61, 62, 63, 64, 65, 66, 67 or 68 which is a human antibody.

74. (new) A method for detecting the presence of OPG in a biological sample comprising:

incubating the sample with the antibody or fragment of Claims 61, 62, 63, 64, 65, 66, 67 or 68 under conditions that allow binding of the antibody to OPG; and  
detecting the bound antibody.

75. (new) A method for removing OPG from a biological sample comprising:

contacting the sample with the antibody or fragment of Claims 61, 62, 63, 64, 65, 66, 67 or 68 under conditions that allow binding of the antibody to OPG; and  
removing the antibody from the sample.

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